

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original) A hologram plate comprising an array of a transmission type of collective element holograms that diffract parallel light incident thereon at a specific wavelength and a specific incident angle in such a way that the parallel light is converged on a specific focal length position, which comprises a multilayer structure made up of a first transparent substrate, a hologram layer, an adhesive layer and a second transparent substrate, said second transparent substrate defining a surface in contact with a hologram photosensitive material when hologram replication is carried out.

2. (original): The hologram plate according to claim 1, wherein said second transparent substrate has a thickness substantially double the focal length of each collective element hologram, inclusive of the thickness of said adhesive layer.

3. (original): The hologram plate according to claim 1, wherein between said hologram layer and said adhesive layer there is interleaved a water-soluble protective layer.

4. (original): The hologram plate according to claim 3, wherein said second transparent substrate has a thickness substantially double the focal length of each collective element hologram, inclusive of the thicknesses of said adhesive layer and said water-soluble protective layer.

5. (currently amended): The hologram plate according to ~~any one of claims~~ claim 1 ~~to 4~~, wherein said hologram layer has a diffraction efficiency preset in such a way as to allow zero-order light and first-order light diffracted by said hologram layer to have substantially the same intensity.

6. (currently amended): The hologram plate according to ~~any one of claims~~ claim 1 ~~to 5~~, wherein an absorbing layer is located at any desired position between said hologram layer and said second transparent layer, and a light-absorbing material is dispersed throughout said absorbing layer in such a way so as to allow zero-order light and first-order light diffracted by

said hologram layer to have substantially the same intensity.

7. (currently amended): The hologram plate according to ~~any one of claims~~ claim 1 to 5, wherein an absorbing layer is located on the surface of said second transparent layer, and a light-absorbing material is dispersed throughout said absorbing layer in such a way so as to allow zero-order light and first-order light diffracted by said hologram layer to have substantially the same intensity.

8. (original): A process for fabricating a hologram plate comprising an array of a transmission type of collective element holograms that diffract parallel light incident thereon at a specific wavelength and a specific incident angle in such a way that the parallel light is converged on a specific focal length position, said hologram plate comprising a multilayer structure made up of a first transparent substrate, a hologram layer, an adhesive layer and a second transparent substrate, and said second transparent substrate defining a surface in contact with a hologram photosensitive material when hologram replication is carried out, wherein:

said adhesive layer comprises an ultraviolet curing adhesive agent,

said multilayer structure, obtained by forming said hologram layer on said first transparent substrate and then superposing said second transparent substrate on said hologram layer with an uncured ultraviolet curing adhesive agent interleaved therebetween, is spun to spin an extra portion of said adhesive agent out of the periphery thereof, thereby making said adhesive layer uniform, while the rpm of said multilayer structure is controlled to obtain a desired thickness, and

said multilayer structure is irradiated with ultraviolet radiation through said first transparent substrate or said second transparent substrate to cure said adhesive agent.

9. (original): The hologram plate fabrication process according to claim 8, wherein said hologram is exposed to p-polarized light.

10. (original): The hologram plate fabrication process according to claim 8, wherein said hologram is exposed to s-polarized light.

11-17. (canceled).

18. (original): A hologram plate comprising a hologram layer with interference fringes formed thereon, a first layer capable of being removed with water or a solvent, which is

provided on the surface of said hologram layer or a transparent layer formed thereon, and a second layer of a curing resin capable of being cured by light or heat, which is formed on said first layer.

19. (original): The hologram plate according to claim 18, wherein said hologram layer is an amplitude type hologram layer with a metal film patterned thereon.

20. (original): The hologram plate according to claim 18, wherein said hologram layer is a hologram layer comprising a hologram photosensitive material layer with interference fringes recorded therein.

21. (original): The hologram plate according to ~~any one of claims~~ claim 18 ~~to 20~~, wherein said first layer is capable of absorbing light.

22. (original): The hologram plate according to ~~any one of claims~~ claim 18 ~~to 21~~, which comprises a transmission type hologram.

23. (original): The hologram plate according to ~~any one of claims~~ claim 18 ~~to 21~~, which comprises a reflection type hologram.